Blue Ridge Environmental Defense League

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March 3, 2022

Jennifer M. Granholm, Secretary of Energy US Dept. of Energy 1000 Independence Ave., SW Washington, DC 20585 consentbasedsiting@hq.doe.gov

Re: RFI—Consent-Based Siting and Federal Interim Storage, 86 Fed. Reg. 68244

Dear Secretary Granholm:

On behalf of the Blue Ridge Environmental Defense League and our chapters in Virginia, North Carolina, South Carolina, Tennessee, Alabama and Georgia, I write in response to the above-captioned RFI regarding informed consent-based siting and the disposition of irradiated nuclear fuel.¹

From the beginning, the principle of informed consent has centered in medical therapy and research. Since the early expositions on the concept in Nuremberg after WW2, informed consent has been associated with what a physician may and may not do and in the area of research intrinsically experimental in nature. Is informed consent even applicable to the concept of radioactive waste disposal? We believe not.

In the United States, the ethics of informed consent were elucidated by the erstwhile U.S. Department of Health, Education and Welfare in its 1979 Belmont Report:²

The consent process can be analyzed as containing three elements: information, comprehension and voluntariness.

1) Information. Most codes of research establish specific items for disclosure intended to assure that subjects are given sufficient information. These items generally include: the research procedure, their purposes, risks and anticipated benefits, alternative procedures (where therapy is involved), and a statement offering the subject the opportunity to ask questions and to withdraw at any time from the research.

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¹ In these comments, I will use the term "irradiated fuel" instead of "spent nuclear fuel." The radioactive waste which is the subject of this inquiry is nuclear fuel rods which have been installed in a nuclear reactor core until the byproducts of nuclear fission render the fuel unusable. The fuel is by no means "spent," because much nuclear energy is still present. The toxic byproducts of atomic fission are the problem.

² *The Belmont Report*: Ethical Principles and Guidelines for the Protection of Human Subjects of Research, The National Commission for the Protection of Human Subjects of Biomedical and Behavioral Research, April 18, 1979, available March 2022 at http://www.hhs.gov/ohrp/humansubjects/guidance/belmont.html

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2) Comprehension. The manner and context in which information is conveyed is as important as the information itself. For example, presenting information in a disorganized and rapid fashion, allowing too little time for consideration or curtailing opportunities for questioning, all may adversely affect a subject's ability to make an informed choice.

3) Voluntariness. An agreement to participate in research constitutes a valid consent only if voluntarily given. This element of informed consent requires conditions free of coercion and undue influence. Coercion occurs when an overt threat of harm is intentionally presented by one person to another in order to obtain compliance. Undue influence, by contrast, occurs through an offer of an excessive, unwarranted, inappropriate or improper reward or other overture in order to obtain compliance. Also, inducements that would ordinarily be acceptable may become undue influences if the subject is especially vulnerable.

The Consolidated Appropriations Act 0f 2021 advocates a consent–based approach to siting nuclear waste management facilities. But how would any Administration carry out this charge honorably, impartially and ethically? As outlined in the *Belmont Report*, presenting information in a tendentious fashion, or allowing too little time for consideration or curtailing opportunities for questioning, adversely affects a subject's ability to make an informed choice. Plus there is the possibility that silence may be construed as consent. The element of voluntariness is sharply questionable with regard to the communities, which will likely become the subjects of this process. Even inducements that would ordinarily be acceptable may become undue and improper if the subject is especially vulnerable, such as an economically depressed or politically powerless community. These dumpsite programs invariably come with promises of jobs and economic development, promises which short-circuit debate and sway elected officials.

Working in communities in the Southeast since 1984, we are well aware of radioactive waste initiatives going out to potential waste dump communities. The Blue Ridge Environmental Defense League was founded because of one such program, the DOE's Crystalline Repository Project and interim Monitored Retrievable Storage Site.³ We have continually opposed such radioactive waste dumps wherever they are proposed, including Yucca Mountain, Nevada. Likewise, we oppose so-called consolidated interim storage schemes—including the Holtec International/Eddy-Lea Energy Alliance site in New Mexico and the Waste Control Specialists site in Andrews County, Texas—because nuclear waste shipments to those sites would unnecessarily place millions of people at

³ P.L. 97-425, 96 Stat. 2201, 42 U.S.C. §108, Signed into law by President Reagan Jan. 7, 1981

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risk from accident, sabotage, and routine transport exposure. Tribal governments should be at the forefront of this discussion and the decision making process.

In a study done by the State of Nevada, a nationwide irradiated fuel shipping process carried out without an accident would result in the following levels of routine radiation exposure:⁴

- Truck safety inspectors would receive 2,500 millirems per year (mrem/yr);
- Occupants of a vehicle next to a spent fuel truck in a traffic situation lasting one to four hours would receive 10 40 mrem per person per incident;
- Members of the public along potential legal weight truck routes in Nevada could receive between 150 - 260 mrem/yr.

Malevolent acts against nuclear fuel and high-level waste shipments are a major threat. The Nuclear and Radiation Studies Board, unable to perform an in-depth technical examination of transportation security because of classified information constraints, nevertheless made the following recommendation:

An independent examination of the security of spent fuel and high-level waste transportation should be carried out prior to the commencement of large-quantity shipments to a federal repository or to interim storage. This examination should provide an integrated evaluation of the threat environment, the response of packages to credible malevolent acts, and operational security requirements for protecting spent fuel and high-level waste while in transport. This examination should be carried out by a technically knowledgeable group that is independent of the government and free from institutional and financial conflicts of interest. This group should be given full access to the necessary classified documents and Safeguards Information to carry out this task. The findings and recommendations from this examination should be made available to the public to the fullest extent possible.⁵

A comprehensive review of nuclear fuel and high-level waste transportation security should have unrestricted access to the information necessary to do this analysis.

Invocation of the Consolidated Appropriations Act must not be allowed obscure the facts about the nuclear fuel cycle, which would unfairly prevent citizens from knowing the nature of the risk. The goal of the Blue Ridge Environmental Defense League is to counter technical jargon that prevents directly affected residents from effective democratic participation. Public participation is essential to protect our families and communities from becoming victims of industrial contamination.

⁵ Going the Distance? The Safe Transport of Spent Nuclear Fuel and High-Level Radioactive Waste in the United States (2006) National Academies Nuclear and Radiation Studies Board.

⁴ Risky Transit—The Federal Government's Risky and Unnecessary Plan to Ship Spent Nuclear Fuel and Highly Radioactive Waste on the Nation's Highways and Rail Roads, A Report by the Nevada Agency for Nuclear Projects

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Further, existing storage of irradiated fuel at nuclear reactor sites must be responsive to the communities where the power plants are located. The concerns of these communities are presented in "Community Principles for Safeguarding Nuclear Waste at Reactors."

The principle of consent is enshrined in the Declaration of Independence: "That to secure these rights, Governments are instituted among Men, deriving their just powers from the consent of the governed." Consent of the governed is anathema to the "divine right of kings," which it supplanted. In many ways, electric power companies are the 21st Century equivalent of the Second Estate. This modern equivalent of the nobility has enormous financial and political resources. They enjoy special privileges; for example, claiming the rights of natural persons while being virtually immortal and exceptionally free from prosecution.

The principles of Environmental Justice incorporate 1) the equitable distribution of environmental risks and benefits; 2) the meaningful participation in environmental decision-making; 3) the recognition of community life, local knowledge, and cultural difference; and 4) the capability of communities and individuals to function in society. It means avoiding disproportionate adverse environmental impacts on low-income populations and minority communities.

For decades, the transfer of liability from private hands to public entities has been the underlying factor driving nuclear waste site legislation. The assumption of this liability by the people via a government agency is a transfer of wealth from poor to rich. Therefore, we see no just application of informed consent to the imposition of a nuclear waste legacy lasting millennia.

Thank you for this opportunity to share our views.

Respectfully,

Jenn Galler, Community Organizer and Project Manager

http://www.BREDL.org

Founded in 1984, BREDL has chapters in Alabama, Tennessee, Georgia, South Carolina, North Carolina and Virginia.

http://www.citizen.org/documents/PrinciplesSafeguardingIrradiatedFuel.pdf

 $^{^{\}rm 6}$ Originally posted June 4, 2007 and available presently at:

⁷ Defining Environmental Justice: Theories, Movements, and Nature, Schlosberg, David (2007) Oxford University Press.